

PHY232 Fall 2010

Michigan State University

Instructor Information

PHY 232 (lecture section 001)
Prof. Bernard Pope
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Course Description

Electricity and magnetism; geometric and wave optics; special relativity; quantum mechanics; atomic and nuclear physics.

Prerequisites

PHY 231 or PHY 231B or PHY 231C or PHY 183 or PHY 183B or PHY 193H or LBS 271.

Class Hours

PHY 232 (lecture section 001)
Tuesday and Thursday, 6:10-7:30 PM, BPS 1410.

Helproom Hours

Room 1248 BPS
Hours: TBA

Exam Information

Exam #1: Oct 7, Th, 6:10-7:10 PM, Location: 1281 Anthony
Exam #2: Nov 4, Th, 6:10-7:10 PM, Location: 1281 Anthony
Exam #3: Nov 23, Tu, 6:10-7:10 PM, Location: 1281 Anthony
Final Exam: Dec. 14, Tu, 5:45-7:45 PM, Location: TBA

Grading Information

Percent weights for PHY 232 (lecture section: 001):
Clicker questions: 6%.
Homework: 16%.
Three midterm exams: $3 \times 16\% = 48\%$.
Final exam: 32%.

The weights for the class add up to 102%.

Clicker questions: Correct answer: 3 points. Incorrect answer: 1 point. Not present: zero point.
Homework: Every homework question is worth 1 point.

Midterm exams: Maximum score on each midterm: 50 points. The midterm exams will have correction exams as a homework. 30% of the positive difference between the correction exam and the in-class exam will be added to your in-class exam score as bonus.

Final Exam: Maximum score on the final: 100 points. The final exam will not have correction. Four single sides of US letter sized help sheets are allowed on the final exam: three from the midterms and one from the last block of the class.

Grading scale:

4.0 \geq 92%,
3.5 \geq 84%,
3.0 \geq 76%,
2.5 \geq 68%,
2.0 \geq 60%,
1.5 \geq 52%,
1.0 \geq 44%,
0.0 $<$ 44%.

This grading scale might be lowered, but it will not be raised.

Readings

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Tuesd --- Thurs | Week, Chapter, Topic  
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XX/XX --- 09/02 | 1 Ch 20 Intro and Electric Force  
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09/07 --- 09/09 | 2 Ch 20 Electric Fields  
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09/14 --- 09/16 | 3 Ch 21 Electric Potential  
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09/21 --- 09/23 | 4 Ch 22 Current and Resistance  
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09/28 --- 09/30 | 5 Ch 23 Circuits  
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10/05 - Tuesday | 6 Review  
10/07 - Thursday | Exam #1 6:10-7:10 PM, Loc. TBA  
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10/12 --- 10/14 | 7 Ch 24 Magnetic Fields and Forces  
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10/19 --- 10/21 | 8 Ch 25 EM Induction  
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10/26 --- 10/28 | 9 Ch 25 AC Circuits  
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11/02 - Tuesday | 10 Review  
11/04 ----- | Exam #2 6:10-7:10 PM, Loc. TBA.  
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11/09 --- 11/11 | 11 Ch 18,19 Ray Optics, Instruments  
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11/16 --- 11/18 | 12 Ch 17 Wave Optics, Review
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11/23 - Tuesday | Exam #3 6:10-7:10 PM, Loc. TBA
11/25 -Thursday | 13 Thanksgiving (University Closed)

11/30 --- 12/02 | 14 Ch 27 Relativity, Ch 28 Quantum Physics

12/07 --- 12/09 | 15 Ch 29 Atoms & Molec. Ch 30 Nuclear Physics

12/16 Wednesday | Final Exam 5:45-7:45 PM, Loc. TBA.

Textbook

Knight, Jones, Field: College Physics (A Strategic Approach), Second Edition, Volume 2.